

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-69-AD; Amendment 39-11906; AD 2000-19-05]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-100, -200, -200C, -300, -400, and -500 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document corrects information in an existing airworthiness directive (AD) that applies to certain Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. That AD supersedes AD 99-05-15, amendment 39-11063, to require a one-time inspection of the attachment nuts at each end attachment of the elevator tab push rods to measure run-on torque values, and corrective actions, if necessary. That AD also requires replacement of all existing bolts and attachment nuts at the forward and aft end attachment of each elevator tab push rod with new bolts and self-locking castellated nuts with cotter pins. This document corrects an inadvertent error regarding the compliance time for certain requirements of that AD. This correction is necessary to provide an adequate compliance time for the replacement of certain parts.

DATES: Effective October 25, 2000.

The incorporation by reference of Boeing Service Letter 737-SL-27-118-D, dated December 17, 1999, was approved previously by the Director of the Federal Register as of October 25, 2000 (65 FR 56783, September 20, 2000).

The incorporation by reference of Boeing Alert Service Bulletin 737-27A1205, dated August 28, 1997, was approved previously by the Director of the Federal Register as of March 23, 1999 (64 FR 10935, March 8, 1999).

FOR FURTHER INFORMATION CONTACT: Scott Fung, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1221; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: On September 12, 2000, the Federal Aviation Administration (FAA) issued AD 2000-19-05, amendment 39-11906 (65 FR 56783, September 20, 2000), which applies to certain Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. That AD supersedes AD 99-05-15, amendment 39-11063, to require a one-time inspection

of the attachment nuts at each end attachment of the elevator tab push rods to measure run-on torque values, and corrective actions, if necessary. That AD also requires replacement of all existing bolts and attachment nuts at the forward and aft end attachment of each elevator tab push rod with new bolts and self-locking castellated nuts with cotter pins. That AD was prompted by reports of excessive high-frequency airframe vibration during flight, with consequent structural damage to the elevator tab, elevator, and stabilizer. The actions required by that AD are intended to prevent detachment of an elevator tab push rod due to a detached nut at either end attachment of a push rod, which could result in excessive high-frequency airframe vibration during flight; consequent structural damage to the elevator tab, elevator, and horizontal stabilizer; and reduced controllability of the airplane.

Need for the Correction

Since the issuance of AD 2000-19-05, the FAA has reviewed the wording in paragraph (b) of that AD and finds that there was an inadvertent error in the compliance time. In the preamble of AD 2000-19-05, the FAA concurred with a commenter's request to extend the compliance time in paragraph (b) from, "Within 12 months or 4,000 flight cycles after the effective date of this AD, whichever occurs first: * * *" to "Within 24 months or 4,000 flight cycles after the effective date of this AD, whichever occurs first: * * *" However, in the final rule the FAA inadvertently retained the proposed compliance time of "Within 12 months * * *" This AD corrects the compliance time for paragraph (b) of that AD to read, "Within 24 months or 4,000 flight cycles after the effective date of this AD, whichever occurs first: * * *"

Correction of Publication

This document corrects the error and correctly adds the AD as an amendment to §39.13 of the Federal Aviation Regulations (14 CFR 39.13).

The AD is reprinted in its entirety for the convenience of affected operators. The effective date of the AD remains October 25, 2000.

Since this action only corrects an error, which extends the compliance time in that AD, it has no adverse economic impact and imposes no additional burden on any person. Therefore, the FAA has determined that notice and public procedures are unnecessary.

List of Subject in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Correction

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Corrected]

2. Section 39.13 is amended by correctly adding the following airworthiness directive (AD):

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-69-AD; Amendment 39-11906; AD 2000-19-05]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-100, -200, -200C, -300, -400, and -500 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD); applicable to certain Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes; that currently requires a one-time inspection of the attachment nuts at each end attachment of the elevator tab push rods to measure run-on torque values, and corrective actions, if necessary. This amendment adds a requirement to replace all existing bolts and attachment nuts at the forward and aft end attachment of each elevator tab push rod with new bolts and self-locking castellated nuts with cotter pins. This amendment is prompted by reports of excessive high-frequency airframe vibration during flight, with consequent structural damage to the elevator tab, elevator, and stabilizer. The actions specified by this AD are intended to prevent detachment of an elevator tab push rod due to a detached nut at either end attachment of a push rod, which could result in excessive high-frequency airframe vibration during flight; consequent structural damage to the elevator tab, elevator, and horizontal stabilizer; and reduced controllability of the airplane.

DATES: Effective October 25, 2000.

The incorporation by reference of Boeing Service Letter 737-SL-27-118-D, dated December 17, 1999, as listed in the regulations, is approved by the Director of the Federal Register as of October 25, 2000.

The incorporation by reference of Boeing Alert Service Bulletin 737-27A1205, dated August 28, 1997, was approved previously by the Director of the Federal Register as of March 23, 1999 (64 FR 10935, March 8, 1999).

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules

Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Scott Fung, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1221; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 99-05-15, amendment 39-11063 (64 FR 10935, March 8, 1999); applicable to certain Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes; was published in the Federal Register on December 3, 1999 (64 FR 67807). The action proposed to continue to require a one-time inspection of the attachment nuts at each end attachment of the elevator tab push rods to measure run-on torque values, and corrective actions, if necessary. The action also proposed to add a requirement to replace all existing bolts and attachment nuts at the forward and aft end attachment of each elevator tab push rod with new bolts and self-locking castellated nuts with cotter pins.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Supportive Comment

One commenter supports the proposed rule.

Request To Extend Compliance Time in Paragraph (b)

Several commenters request that the FAA extend the proposed compliance time for the replacement of the existing bolts and attachment nuts specified in paragraph (b) of the proposal. One commenter requests that the proposed compliance time be extended from 12 months to 18 months after the effective date of this AD. The commenter indicates that an 18-month compliance time will allow the work to be incorporated into its regularly scheduled maintenance visits when sufficient time and resources are available.

A second commenter requests that the proposed compliance time be extended to within 24 months after the effective date of this AD, not to exceed 4,000 flight cycles. The commenter states that this change will enable the tab freeplay inspections and tab push rod bolt and nut replacement to be made concurrently during a regularly scheduled major maintenance check (a "C" check). The commenter adds that this change also will reduce the impact on fleet operations, a concern operators expressed during the lead airline reviews for Boeing Service Bulletin 737-55A1070, dated January 13, 2000. According to the commenter, 737-55A1070 specifies that tab installation inspections and tab hinge and tab trailing edge freeplay checks be made within 4,000 flight cycles or 24 months after release of the service bulletin. That service bulletin also has repeat inspections at 1,500 flight cycles or 2,000 flight hours.

A third commenter requests an extension of the proposed compliance time to 24 months after the effective date of this AD. The commenter states that the extension would allow accomplishment of the replacement during its heavy maintenance checks.

A fourth commenter requests an extension of the proposed compliance time to 4 years after the effective date of this AD. The commenter states that replacement of the hardware cannot be done in a short (overnight) maintenance visit. The commenter proposes that the compliance time be extended in order to allow the work to be accomplished during a major maintenance visit. The commenter

currently is working on replacing the subject hardware per the accomplishment schedule in the proposed rule. The commenter indicates that the inspection of the bolts for current run-on torque values specified in the proposal has been accomplished on its fleet, and the attachment hardware has been replaced if its condition was beyond allowable limits. In light of this fact, the commenter notes that an extension of the compliance time for the remaining attachments should not pose a significant decrease in safety.

The FAA concurs with the commenters' requests to extend the compliance time required by paragraph (b) of the final rule. Following careful consideration of the comments, and in light of the fact that AD 99-05-15, amendment 39-11063, mandated the one-time inspection and corrective actions, the FAA has determined that it will not compromise safety to extend the compliance time for the replacement required by paragraph (b) of this AD. Therefore, the compliance time in paragraph (b) of this final rule has been extended to within 24 months or 4,000 flight cycles after the effective date of this AD, whichever occurs first.

Request To Revise Cost Impact Information

One commenter states that the actual time required to modify an airplane (replace the existing bolts and nuts) is 12 work hours and will exceed the 4 work hours estimated in the proposed rule. The commenter adds that the modification cannot be done during an overnight maintenance visit without disrupting service, and special routing would be required.

The FAA acknowledges that the cost impact information, below, describes only the "direct" costs of the specific actions required by this AD. The estimate of 12 work hours submitted by the commenter includes time for gaining access and closing up. The cost analysis in AD rulemaking actions, however, typically does not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions. Because incidental costs may vary significantly from operator to operator, they are almost impossible to calculate. The number of work hours necessary to accomplish the required actions, specified as 4 in the cost impact information in the proposal and restated below, represents the time necessary to perform only the actions actually required by this AD (that is, the replacement). No change to the final rule is necessary in this regard.

Later Revision of Service Letter

Two commenters state that the most current revision level of the service letter should be used in the proposed rule. The FAA agrees with the commenters statement. The FAA has reviewed and approved Boeing Service Letters 737-SL-27-118-B, dated April 14, 1999; 737-SL-27-118-C, dated May 19, 1999; and 737-SL-27-118-D, dated December 17, 1999; and finds that they are essentially similar to the service letter referenced in paragraphs (a)(2) and (b) of the proposed rule. Accordingly, Revision `D' has replaced the reference to Revision `A' in paragraphs (a)(2) and (b) of this AD. In addition, a new note (Note 3) has been added to this final rule to give credit for accomplishment of the actions in paragraphs (a)(2) and (b) of this AD in accordance with Revisions `A,' `B,' or `C' of the service letter prior to the effective date of this AD.

Explanation of Change to Proposal

Since the issuance of the notice of proposed rulemaking (NPRM), the FAA has concluded that paragraph (c)(2) of the proposal is incorrect. That paragraph reads, "Alternative methods of compliance (AMOC), approved previously in accordance with AD 99-05-15, amendment 39-11063, are NOT considered to be approved as alternative methods of compliance with this AD." The FAA has determined that the AMOC's specified are indeed approved. Therefore, paragraph (c)(2) of this final rule has been revised accordingly.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 2,742 airplanes of the affected design in the worldwide fleet. The FAA estimates that 1,106 airplanes of U.S. registry will be affected by this AD.

The new replacement that is required in this AD action takes approximately 4 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$560 per airplane. Based on these figures, the cost impact of the replacement required by this AD on U.S. operators is estimated to be \$884,800, or \$800 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the current or new requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

The one-time inspection required by AD 99-05-15 was required to be accomplished within 90 days after the effective date of that AD (March 23, 1999). Since the 90-day compliance time has passed, the FAA assumes that all airplanes currently on the U.S. Register have been inspected. Therefore, there is no future cost impact of this requirement on current U.S. operators of these airplanes.

However, should an affected airplane be imported and placed on the U.S. Register in the future, it would take approximately 4 work hours per airplane to accomplish the one-time inspection, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the inspection required by this AD on U.S. operators is estimated to be \$240 per airplane.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-11063 (64 FR 10935, March 8, 1999), and by adding a new airworthiness directive (AD), amendment 39-11906, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

CORRECTION: [*Federal Register: November 1, 2000 (Volume 65, Number 212); Page 65258-65260; www.access.gpo.gov/su_docs/aces/aces140.html*]

2000-19-05 Boeing: Amendment 39-11906. Docket 99-NM-69-AD. Supersedes AD 99-05-15, Amendment 39-11063.

Applicability: Model 737-100, -200, -200C, -300, -400, and -500 series airplanes; line numbers 1 through 2939 inclusive; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent detachment of an elevator tab push rod due to a detached nut at either end attachment of a push rod, which could result in excessive high-frequency airframe vibration during flight; consequent structural damage to the elevator tab, elevator, and horizontal stabilizer; and reduced controllability of the airplane; accomplish the following:

Restatement of Requirements of AD 99-05-15

One-Time Inspection

(a) Within 90 days after March 23, 1999 (the effective date of AD 99-05-15, amendment 39-11063): Perform a one-time inspection of all attachment nuts at each end of each elevator tab push rod to measure the run-on torque values of the nuts, in accordance with Boeing Alert Service Bulletin 737-27A1205, dated August 28, 1997.

Corrective Actions

(1) If the run-on torque value of any end attachment nut is within the limits specified in the alert service bulletin, prior to further flight, ensure that the final seating torque of the attachment nuts is within the torque values specified in the alert service bulletin.

(2) If the run-on torque value of any end attachment nut is outside the limits specified in the alert service bulletin, prior to further flight, replace all existing bolts and attachment nuts at each end of each elevator tab push rod with new bolts and self-locking castellated nuts that have cotter pins installed as a secondary locking feature, in accordance with Boeing Service Letter 737-SL-27-118-D, dated December 17, 1999, and ensure that the final seating torque of the nuts is within the torque values specified in the service letter.

Note 2: Accomplishment of the inspection and ensuring adequate final seating torque values prior to the effective date of this AD in accordance with Boeing All-Base Telex M-7272-97-0897, dated February 13, 1997, are considered acceptable for compliance with the actions specified in paragraphs (a) and (a)(1) of this AD for only the forward attachment nuts.

New Requirements of This AD

Replacement

(b) Within 24 months or 4,000 flight cycles after the effective date of this AD, whichever occurs first: Replace all existing bolts and attachment nuts at the forward and aft end attachment of each elevator tab push rod with new bolts and self-locking castellated nuts that have cotter pins installed as a secondary locking feature, in accordance with Boeing Service Letter 737-SL-27-118-D, dated December 17, 1999.

Note 3: Replacements accomplished prior to the effective date of this AD in accordance with Boeing Service Letter 737-SL-27-118-A, dated November 14, 1997; 737-SL-27-118-B, dated April 14, 1999; or 737-SL-27-118-C, dated May 19, 1999; are considered acceptable for compliance with paragraphs (a)(2) and (b) of this AD.

Alternative Methods of Compliance

(c)(1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 99-05-15, amendment 39-11063, are considered to be approved as alternative methods of compliance with paragraph (a) of this AD only.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with Secs. 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with Boeing Alert Service Bulletin 737-27A1205, dated August 28, 1997, and Boeing Service Letter 737-SL-27-118-D, dated December 17, 1999.

(1) The incorporation by reference of Boeing Service Letter 737-SL-27-118-D, dated December 17, 1999, was approved previously by the Director of the Federal Register as of October 25, 2000 (65 FR 56783, September 20, 2000).

(2) The incorporation by reference of Boeing Alert Service Bulletin 737-27A1205, dated August 28, 1997, was approved previously by the Director of the Federal Register as of March 23, 1999 (64 FR 10935, March 8, 1999).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) The effective date of this amendment remains October 25, 2000.

Issued in Renton, Washington, on October 24, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00-27791 Filed 10-31-00; 8:45 am]

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